paper he read before this Society some years ago, wherein he traced a resemblance between puerperal fever and typhus, and referred them both to the same group or family of diseases."[1]—*Dublin Quarterly Journal of Medical Science*, May, 1855.

68. *Resorption of the Placenta.* Dr. Sabatier, of Bédarieux (France), has published in *L'Union Médicale* of the 24th of April, 1855, three very interesting cases, which would tend to show that portions of retained placenta may be absorbed, and be rejected from the economy, partly by way of the bronchi. The author thinks that the veins take up the products of decomposition, which, entering the torrent of the circulation, are eliminated in the shape of the various excretions—such as the perspiration, saliva, tears, &c.; and he holds that the very fetid expectoration, which was noticed in his three patients, shows that the putrid substances are also taken up by the lymphatics. M. Sabatier does not, however, dogmatize on the subject, but calls attention to the facts, and these certainly point very clearly to an abundant casting off of sphacelated matter from the lungs, without any of the signs which would accompany gangrenous inflammation of these organs. We would beg our readers to refer to a case of this kind brought before the Medical Society of London, by Dr. Winn.

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

69. *Prolonged Retention of Life by Infants who have not Breathed.*—The long period during which life may, under certain circumstances, be retained by the infant who has never breathed, is a fact full of interest to the physiologist, the medical jurist, and the accoucheur. The experiments of Legallois show that, in the mammalia, the fœtus which has not breathed can resist death from submersion much longer than the fœtus in which respiration has been carried on. Puppies and kittens, immediately after birth, may be kept under water for twenty-eight minutes with impunity; when five days old, they perish after sixteen minutes' submersion; and, when fifteen days old, they die as rapidly as other warm-blooded animals of any age, from deprivation of air. The human stillborn fœtus can probably live longer without respiration than any other mammalian fœtus. The following cases are collected in the *Gazette Hebdomadaire* for December 1, 1854, from different sources. They are very striking, and very suggestive to the practical accoucheur.

Case 1.—A woman, aged 25, who had tried to conceal her pregnancy, was delivered when seated on a tub. The infant, born without any signs of life, was buried in a sand-pit, and, after remaining there for half an hour, was removed, and lived. This case is described by Dr. Weese in 1845, in *Badisch. Ann. f. Staatsarz*, x, 2.

Case 2.—In 1850, a young woman was tried by the tribunals of Berlin, who had buried her new-born male infant, believing it to be dead. After an hour, the infant was disinterred, and recalled to life.

Case 3.—T. P., a servant, aged 23, was delivered in a stable, when leaning against the wall, alone, and in a state of unconsciousness, about half past 4 A. M., on the 16th of October. When she came to herself, she found the infant on the ground, having a spade lying upon it, with its cutting edge turned to the body. She took the infant, which was perfectly cold, believing it to be dead, and, with the placenta attached, wrapped it up in her apron, and buried it in the garden. Suspicions arose that she had been confined: she confessed; and, at half past nine, the infant was dug up from a depth of thirty *centimetres.* It was found lying on its face, with the placenta under the abdomen. Though cold, apparently dead, and pulseless, the cord was tied. For two hours, P., a surgeon, used means to reanimate it, when at last it began to breathe feebly, gradually signs of life became more evident, and it cried. Some slight wounds were observed on its body: wounds in the neck, which did not bleed at first, bled when the infant was restored. It took the breast greedily. On the 17th and 18th, the wounds suppurated; and, on the 19th, it died of convulsions. The physicians intrusted with the judicial autopsy reported that it had been inhumed before it had breathed; and that it had not breathed till after it was exhumed, and that the statement of the mother was possibly true. She was therefore acquitted of the charge of infanticide, but was found guilty of concealment of pregnancy. This case is reported by Dr. MASCHKA.

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[1] Since writing the above, Dr. Sinclair has informed me that the mode of treatment pursued here in puerperal fever by my predecessor, Dr. Shekleton, differed in only one point from that above described: Dr. Shekleton did not purge as actively as I did. The results of his experience in the disease I do not know; but I am happy to be able to state that a clinical report is in course of preparation, which will furnish us with full particulars not alone on this point, but of the practice and statistics of the hospital during the entire period of Dr. Shekleton's mastership. Such a work must prove of immense value. And I have no doubt but that the two gentlemen, Dr. E. B. Sinclair and Dr. George Johnston, to whose hands its preparation has been intrusted, will fulfil this duty in an able and efficient manner.

Case 4.—A. gave birth about noon, in a private house, to an infant, who gave no signs of life. For an hour, different unsuccessful attempts were made to animate it. The skin became blue, and gradually warmth left it. It was considered dead, and in three hours it was removed to a cold room. [This occurred in January, and the weather was very cold.] Towards evening, it was closed up in a coffin. During the night, the windows of the room remained open. At 11 A. M. on the following day—that is, twenty-three hours after the birth—Dr. Maschka, being accidentally at the house, was asked to look at the body. It was perfectly cold and blue; the eyes and mouth were shut; the joints and the extremities were flexible; there was neither rigidity nor cadaveric discoloration. Astonished at this latter circumstance, but not really doubting that the death of the infant was real, Dr. Maschka placed the stethoscope upon the region of the heart, when, to his amazement, he distinctly heard the sounds of the heart: they were feeble, and at long intervals. It was impossible to appreciate the impulse of the heart against the walls of the chest, or to perceive any movement in the corresponding intercostal space. Attempts at resuscitation were made, but without any effect. At the autopsy on the following day, cadaveric discolorations and rigidity were present. The lungs were of a deep red, and contained no air; they were heavier than water. There was blood in the left, but none in the right side of the heart. It must be admitted—provided the observation of the reporter be correct—that this infant lived twenty-three hours after birth, and never breathed.

Case 5.—The following case is extracted from the *Gazette des Tribunaux* of Feb. 20, 1850: A woman was tried for attempting infanticide; she had buried her infant, but it was dug up, breathed, and lived. The following are the facts: Marie and Renée lived with their father at Vernantes, in the *arrondissement* of Baugé (Maine-et-Loire). On the 16th of May, 1849, Marie was alone in the house with her father. About half past six P. M., Renée came home, found Marie in a swoon, and called the neighbours to her assistance. Marie soon regained consciousness. One of the female neighbours, having observed numerous spots of blood, asked Marie if she had been confined. She replied, "No, it is not yet time." Her father, however, having observed the earth disturbed in a place in the garden, asked her to explain it, when she replied, "I have been confined; but, as my child was stillborn, I buried it in the garden." The child was then disinterred. It was found five *centimetres* [about two inches] below the surface, with its face downwards, and with the placenta attached. Means were used to restore the infant, and it was ere long recalled to life. It was calculated that the infant had been three-quarters of an hour under ground. The accused was acquitted.

The elaborate memoir of Dr. Maschka terminates with the following summary:—

1. New-born infants can live without breathing, not merely for half an hour or an hour, but for a very considerably longer period, even in circumstances the most unfavourable.

2. In such cases, there is obviously not only an arrest of blood in the capillaries of the skin, but the vessels of the different organs are either in a state of permanent contraction, or are filled with a column of stagnant blood.

3. The movements of the heart must gradually become very slow. Here, a very important question presents itself. How can there be circulation in the infant without respiration, and therefore without the production of arterial blood? This condition of passive life can only exist when assimilation is at a minimum, and when the oxygen of the maternal blood is consumed very slowly. The maternal blood must in such cases be sufficient to maintain life.

Dr. Maschka's essay is contained in the *Vierteljahrschrift f. Hoprakt. Heilkunde*, t. iii, 1854. It contains interesting physiological discussions, which will repay perusal.—*Assoc. Med. Journ.*, Dec. 8, 1854.

70. *Lead Poisoning; the Artisans who are most Exposed to it.*—In *Henke's Zeitschrift für die Staatsarzznei Kunde* (Hft. I. 1854), Dr. BIERBAUM has recently published a lengthy paper on this subject, which contains much valuable information on the relative prevalence of this affection among certain kinds of artisans. There are two great classes of men very liable to the lead disease, viz:—

1. Those who are engaged in obtaining the metal, and in manufacturing its preparations.

2. Those who use lead and its compounds for industrial and artistic purposes.

Among the first class are, *a*, the miners who dig the ore, and the foundrymen who fuse it thereafter; both are very often martyrs to the affection. *b*, Also, those engaged in the fabrication of leaden articles. Tanquerel des Planches found that 406 out of 1213 cases of lead poisoning occurred in individuals thus employed. *c*, Those who work among salts of lead, as cinnabar, litharge, etc.

In the second class are found, *a*, Artists. They used to be affected more in former times than they are now, as they were then obliged to grind their own colours in a dry state, and thus they unavoidably inhaled the dust. *b*, Heraldic and decorative painters are not very subject to the disease. Among 1213 cases, 33 were decorative painters (Tanquerel des Planches). *c*, Varnishers of carriages and metal are very often thus affected. *d*, Manufacturers of pottery and earthenware, and porcelain, are also liable on account of the salts of lead used for the process of enamelling. *e*, Artisans in glass-works are not very liable to the disease, although the oxide of lead is used to facilitate the vitrefying process. *f*, Manufacturers of cards and fancy paper are also not much affected, although they use the preparations of lead very extensively. *g*, Type-founders, compositors, and printers, as also, *h*, tinsmiths, etc., are very little subject to it. *i*, Lapidaries are not very much affected by lead colic, for although the stones are subjected to the friction of a leaden wheel, the particles of the metal liberated thereby are not inhaled, as the stones are covered with water and emery powder during the process. Tanquerel des Planches found 35 cases among 1213 of lead disease occurring among lapidaries. *j*, Copper and bronze founders are occasionally affected, on account of the lead which is mixed with these metals. *k*, Workmen in shot manufactories contract lead disease occasionally. Des Planches found 11 cases out of 1213, among those employed in such works.—*Monthly Journ. Med. Sci.*, April, 1855.